

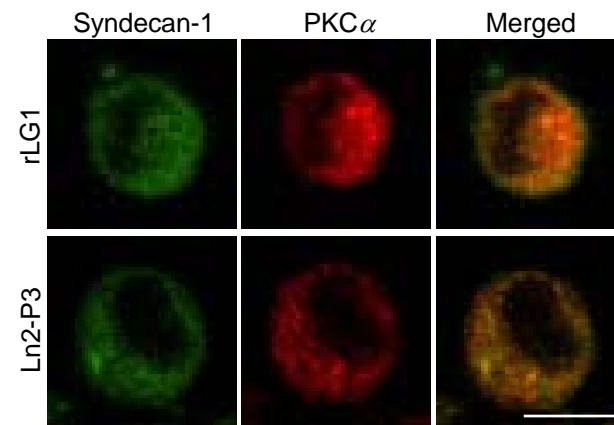
Supplemental Fig. 1. **Colocalization of PKC $\alpha$  with syndecan-1.** PC12 cells were seeded on glass slide chambers precoated with rLG1 or Ln2-P3 for 30 min and immunostained with anti-syndecan-1 antibody (*green*) and anti-PKC $\alpha$  antibody (*red*). Scale bar: 10  $\mu$ m.

Supplemental Fig. 2. **Induction of neurite outgrowth by laminin and Ln2-P3.** Laminin (5  $\mu$ g/ml) and Ln2-P3 (100  $\mu$ g/ml) were coated onto 12-well plates by drying them for 12 h at room temperature, and PC12 cells ( $4 \times 10^4$  cells/well) were seeded on plates, adapted in RPMI 1640 medium containing 10% FBS for 24 h, and then incubated in serum-free medium for 3 h. After changing with serum-free medium again, cells were further cultured for 96 h, and cells with neurites were photographed. PC12 cells, which were cultured in serum-free medium with or without 100 ng/ml nerve growth factor (*None*), were used for positive and negative controls, respectively.

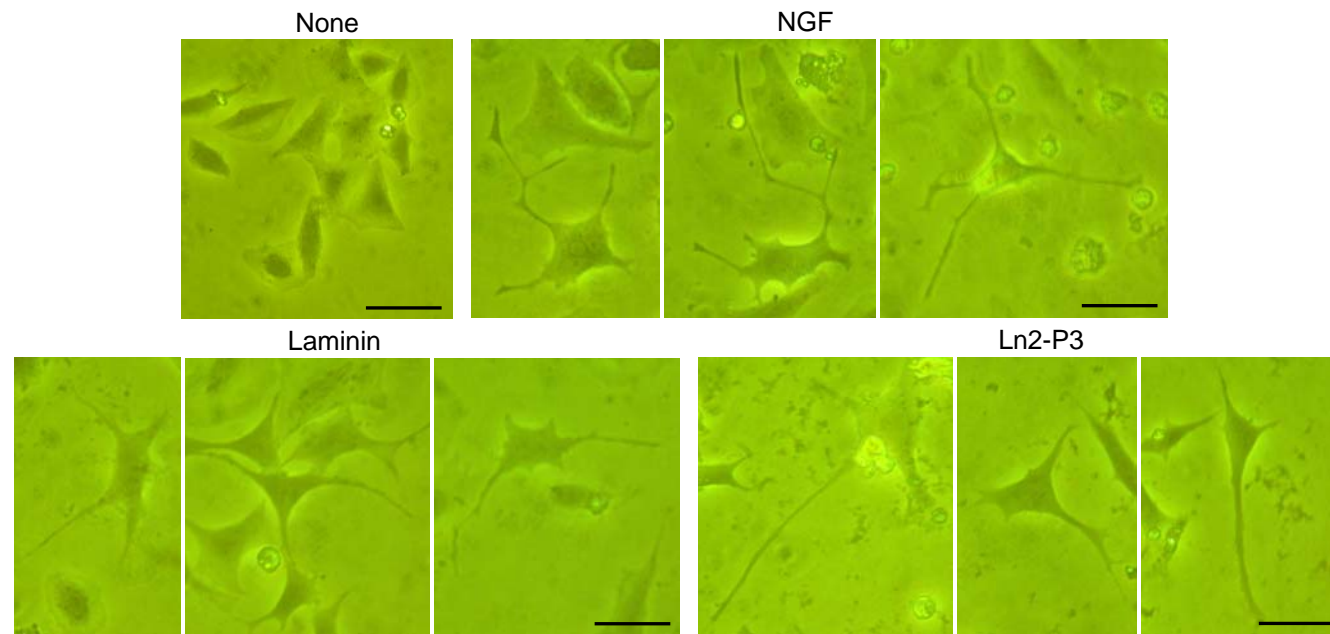
Supplemental Fig. 3. **Comparison of cell adhesion activities of related peptides derived from humans and mice.** *A*, comparison of amino acid sequences among peptides Ln2-P3, Ln2-P4, and MG-10. *B*, adhesion of PC12 cells on plates coated with peptides Ln2-P3, Ln2-P4, or MG-10. The synthetic peptides were coated onto plates by drying them for 12 h at room temperature, and PC12 cells were allowed to adhere for 1 h in serum-free medium. Values are expressed as the mean  $\pm$  S.D. ( $n = 4$ ).

Supplemental Fig. 4. **U73122 treatment reduces cell adhesion to LG1 and Ln2-P3.** PC12 cells were pretreated with U73122, an inhibitor for phospholipase C, for 15 min at 37°C and then seeded on plates precoated with rLG1 and Ln2-P3 for 1 h in serum-free medium. Values are expressed as a percentage of the value for cells pretreated without U73122 (mean  $\pm$  S.D.,  $n = 3$ ). \* $P < 0.01$ .

**Supplementary material Fig. S1**



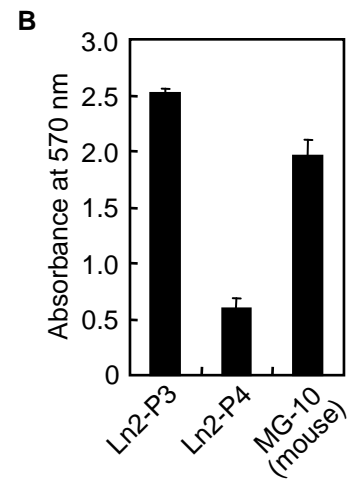
Supplementary material Fig. S2



### Supplementary material Fig. S3

**A**

Peptide	Sequence
Ln2-P3 (human)	DLTIDDSYWYRI
Ln2-P4 (human)	SYWYRIVASRTG
MG-10 (mouse)	SYWYRIEASRTG



Supplementary material Fig. S4

